

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent

In re patent application of: MORITA et al

Serial No.: 09/068,592

Filed: May 14, 1998

For: CATHODE MATERIAL FOR LITHIUM
SECONDARY BATTERY, PROCESS FOR
MANUFACTURING THE SAME, AND
SECONDARY BATTERY USING THE SAME

Examiner: Weiner, L.

Art Unit: 1745

Docket No.: P05934US0/LRP



STATEMENT OF RELEVANCE

Assistant Commissioner of Patents
Washington, D.C.

S I R:

Enclosed herewith are four opposition documents which were mailed on July 11, 2000, together with the appropriate fee.

The relevance of these documents is as follows:

Opposition Document Re Counterpart Japanese Patent No. 2976300

This document argues that Japanese Patent No. 2976300 is not novel over Japanese Unexamined Patent Publication 242912/1988 (hereinafter "JP-A-242912"). JP-A-242912 is cited in the International Search Report. JP-A-242912 discloses a carbon powder comprising aggregate coke covered with quinoline soluble matter. The carbon powder is prepared by dispersing aggregate coke in tar or pitch, followed by extraction the aggregate coke with solvent such as benzene, toluene, pyridine, tar middle oil, tar light oil or a mixture thereof.

Opposition Document Re Counterpart Japanese Patent No. 2976299 No. 1

This document argues that claims 1-5 are not novel over Japanese Unexamined Patent Publication 94838/1993 (hereinafter “JP-A-94838”) which is cited in the International Search Report. According to this document, JP-A-94838 discloses two-layer carbonaceous material prepared by thermal decomposition of organic compound such as aliphatic saturated hydrocarbons, aliphatic unsaturated hydrocarbons and aromatic hydrocarbons in the presence of carbonaceous core material to cover core carbonaceous material with surface carbonaceous material. JP-A-94838 discloses particles of natural graphite and artificial graphite as core carbonaceous material. This document further points out that multi-layer carbonaceous material of JP-A-94838 prepared by gas phase process as shown above has no grinding face. With respect to multi-layer carbonaceous material, JP-A-94838 discloses:

- (i) BET specific surface area is 0.5-100 m²/g;
- (ii) d₀₀₂ is 3.35-3.43 Å;
- (iii) L_c is 20-1000 Å; and
- (iv) True specific gravity is 2.10-2.25 g/cm³.

Opposition Document Re Counterpart Japanese Patent No. 2976299 No. 2

This document states that the application cannot enjoy priority of Japanese patent application 295462/1995, since JP-295462/1995 does not disclose descriptions concerning:

(i) edge parts of a core carbon material are partially coated with a coat-forming carbon material;

(ii) two-layer carbon material is nearly spherical or ellipsoidal; and

(iii) two-layer carbon material has no grinding face.

This document also states that “no grinding face” is not supported by the specification of PCT/JP96/03344.

This document states that the patent is not novel over Japanese Unexamined Patent Publication 222218/1996 (hereinafter “JP-A-222218”). According to this document, JP-A-222218 discloses a multi-phase structured carbon material without exposed core or grinding face, wherein the carbon material have the following properties:

(i) d002 is not more than 0.340 nm;

(ii) Lc is 50 nm or more; and

(iii) volume-based average particle diameter is not more than 30 μm .

Opposition Document Re Counterpart Japanese Patent No. 2976299 No. 3

This document argues that the patent is not novel over Japanese Unexamined Patent Publication 370662/1992 (hereinafter “JP-A-370662”). JP-A-370662 is a

counterpart European patent application EP 0 549 802 A1 which is cited in the
above-mentioned U.S. patent application.

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Respectfully submitted,

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October 26, 2000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE *PATENT*

In re patent application of: MORITA, et al

Serial No.: 09/068,592

Filed: May 14, 1998

For: CATHODE MATERIAL FOR LITHIUM SECONDARY BATTERY, PROCESS FOR MANUFACTURING THE SAME, AND SECONDARY BATTERY USING THE SAME

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ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

S I R:



Attached is:

- ☐ a response after Final Rejection dated
- ☒ a response to the Office Action dated April 26, 2000.
- ☐ a Preliminary Amendment
- ☒ a Petition for an extension of time
- ☒ Other: IDS; List of References; Statement of Relevance; 6 references

Fees: For claims if required and/or other fees as shown below:

	<i>NOW</i>	<i>Previously Paid For</i>	<i>Present Extra</i>	<i>Rate</i>	<u>\$</u>
TOTAL CLAIMS	18	37		X \$ 18 =	
INDEP. CLAIMS	2	5		X \$ 80 =	
TOTAL OF ABOVE CLAIMS FEES=					
Reduction by 1/2 for small entity status of applicant					
SUBTOTAL =					
<input checked="" type="checkbox"/> Fee for extension of time (per attached Petition)					890.00
<input checked="" type="checkbox"/> Other fee for IDS					240.00
TOTAL OF ALL FEES =					1,130.00

☒ A check in the amount of \$1,130 is enclosed. If no check or an insufficient check is enclosed and a fee is due in connection herewith, the Commissioner is authorized to charge any fee or additional fee due in connection herewith to Deposit Account No. 12-0555. A duplicate of this sheet is enclosed.

☒ In the event that a petition for extension of time is required to be submitted herewith and that a separate petition is not submitted herewith, applicant hereby petitions under 37 CFR 1.136(a) for an extension of time of as many months as are required to render this submission timely. Any fee is authorized above.

Respectfully submitted,

Linda R. Poteate

By: Linda R. Poteate

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Date: October 26, 2000

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